

ABSTRACT

Conventional liftoff processes used to define track width in magnetic read heads can produce an uneven etch-depth of dielectric materials around the sensor and cause shorting to the overlay top lead layer. This problem has been overcome by printing the images of track width and stripe height onto an intermediate layer to form a hard mask. Through this hard mask, the GMR stack can be selectively etched and then back-filled with a high-resistivity material by using newly developed electroless plating processes.